## **Patent Claims**

 A method of treating a disease or condition chosen from cancer, infections, inflammatory and autoimmune diseases said method comprising administering to a patient in need thereof a therapeutically effective amount of a compound of the formula (I),

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$$\begin{array}{c|c}
R^{7} & R^{2} \\
N & N & N \\
R^{6} & R^{5} & R^{4}
\end{array}$$
(I)

wherein

15 R<sup>1</sup> denotes a group selected from among hydrogen, NH<sub>2</sub>, XH, halogen and a C<sub>1</sub>-C<sub>3</sub>-alkyl group optionally substituted by one or more halogen atoms,

R<sup>2</sup> denotes a group selected from among hydrogen, CHO, XH, -X-C<sub>1</sub>-C<sub>2</sub>-alkyl and an optionally substituted C<sub>1</sub>-C<sub>3</sub>-alkyl group,

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 $R^3$ ,  $R^4$  are identical or different and denote a group-selected from among optionally substituted  $C_1$ - $C_{10}$ -alkyl,  $C_2$ - $C_{10}$ -alkenyl,  $C_2$ - $C_{10}$ -alkynyl, aryl, heteroaryl,  $C_3$ - $C_8$ -cycloalkyl,  $C_3$ - $C_8$ -heterocycloalkyl, -X-aryl, -X-heteroaryl, -X-cycloalkyl, -X-heterocycloalkyl, -NR $^8$ -aryl, -NR $^8$ -heteroaryl, -NR $^8$ -cycloalkyl, - and -NR $^8$ -

25 heterocycloalkyl, or

a group selected from among hydrogen, halogen, COXR<sup>8</sup>, CON(R<sup>8</sup>)<sub>2</sub>, COR<sup>8</sup> and XR<sup>8</sup>, or

R<sup>3</sup> and R<sup>4</sup> together denote a 2- to 5-membered alkyl bridge which may contain 1 to 2 heteroatoms.

 $R^5$  denotes hydrogen or a group selected from among optionally substituted  $C_1$ - $C_{10}$ -alkyl,  $C_2$ - $C_{10}$ -alkenyl,  $C_2$ - $C_{10}$ -alkynyl, aryl, heteroaryl and - $C_3$ - $C_6$ -cycloalkyl, or  $R^3$  and  $R^5$  or  $R^4$  and  $R^5$  together denote a saturated or unsaturated  $C_3$ - $C_4$ -alkyl bridge which may contain 1 to 2 heteroatoms,

R<sup>6</sup> denotes optionally substituted aryl or heteroaryl,

R<sup>7</sup> denotes hydrogen or -CO-X-C<sub>1</sub>-C<sub>4</sub>-alkyl, and

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X in each case independently of one another denotes O or S, and

 $R^8$  in each case independently of one another denotes hydrogen or a group selected from among optionally substituted  $C_1$ - $C_4$ -alkyl,  $C_2$ - $C_4$ -alkenyl,  $C_2$ - $C_4$ -alkynyl and phenyl,

or the tautomers, the racemates, the enantiomers, the diastereomers and the mixtures thereof, and optionally the pharmacologically acceptable acid addition salts thereof.

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2) A method of treating a disease or condition chosen from HIV, Kaposi's sarcoma, colitis, arthritis, Alzheimer's disease, glomerulonephritis, conditions related to wound healing, bacterial, fungal and/or parasitic infections, leukaemias, lymphoma, solid tumours, psoriasis, bone diseases and cardiovascular disease comprising administering to a patient in need thereof a therapeutically effective amount of a compound of formula (I)

$$\begin{array}{c|c}
R^{7} & R^{2} \\
N & N & N \\
R^{6} & R^{5} & R^{4}
\end{array}$$
(I)

## wherein

R<sup>1</sup> denotes a group selected from among hydrogen, NH<sub>2</sub>, XH, halogen and a C<sub>1</sub>-C<sub>3</sub>-alkyl group optionally substituted by one or more halogen atoms,

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 $R^2$  denotes a group selected from among hydrogen, CHO, XH, -X-C<sub>1</sub>-C<sub>2</sub>-alkyl and an optionally substituted C<sub>1</sub>-C<sub>3</sub>-alkyl group,

R<sup>3</sup>, R<sup>4</sup> are identical or different and denote a group selected from among optionally substituted C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>2</sub>-C<sub>10</sub>-alkynyl, aryl, heteroaryl, C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, C<sub>3</sub>-C<sub>8</sub>-heterocycloalkyl, -X-aryl, -X-heteroaryl, -X-cycloalkyl, -X-heterocycloalkyl, -NR<sup>8</sup>-aryl, -NR<sup>8</sup>-heteroaryl, -NR<sup>8</sup>-cycloalkyl, - and -NR<sup>8</sup>-heterocycloalkyl, or

a group selected from among hydrogen, halogen, COXR<sup>8</sup>, CON(R<sup>8</sup>)<sub>2</sub>, COR<sup>8</sup> and XR<sup>8</sup>, or

R<sup>3</sup> and R<sup>4</sup> together denote a 2- to 5-membered alkyl bridge which may contain 1 to 2 heteroatoms,

 $R^5$  denotes hydrogen or a group selected from among optionally substituted  $C_1$ - $C_{10}$ -alkyl,  $C_2$ - $C_{10}$ -alkenyl,  $C_2$ - $C_{10}$ -alkynyl, aryl, heteroaryl and - $C_3$ - $C_6$ -cycloalkyl, or  $R^3$  and  $R^5$  or  $R^4$  and  $R^5$  together denote a saturated or unsaturated  $C_3$ - $C_4$ -alkyl bridge which may contain 1 to 2 heteroatoms,

R<sup>6</sup> denotes optionally substituted aryl or heteroaryl,

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R<sup>7</sup> denotes hydrogen or -CO-X-C<sub>1</sub>-C<sub>4</sub>-alkyl, and

- X in each case independently of one another denotes O or S, and
- 30 R<sup>8</sup> in each case independently of one another denotes hydrogen or a group selected from among optionally substituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>2</sub>-C<sub>4</sub>-alkenyl, C<sub>2</sub>-C<sub>4</sub>-alkynyl and phenyl,

or the tautomers, the racemates, the enantiomers, the diastereomers and the mixtures thereof, and optionally the pharmacologically acceptable acid addition salts thereof.

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- 3) The methods according to claims 1 or 2 wherein for the formula (I)
- R<sup>1</sup> denotes hydrogen,

 $10 R^2$ 

denotes a group selected from among a CHO, OH, and CH<sub>3</sub> group,

 $R^3$ ,  $R^4$  are identical or different and denote a group selected from among hydrogen, optionally substituted  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl,  $C_2$ - $C_6$ -alkynyl,  $C_3$ - $C_7$ -cycloalkyl, or  $R^3$  and  $R^4$  together denote a  $C_2$ - $C_5$ -alkyl bridge ,

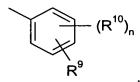
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 $R^5$  denotes a group selected from among optionally substituted  $C_1$ - $C_{10}$ -alkyl,  $C_2$ - $C_{10}$ -alkenyl,  $C_2$ - $C_{10}$ -alkynyl,  $C_3$ - $C_6$ -cycloalkyl and  $C_3$ - $C_6$ -cycloalkenyl, or  $R^3$  and  $R^5$  or  $R^4$  and  $R^5$  together denote a saturated or unsaturated  $C_3$ - $C_4$ -alkyl bridge which may contain 1 to 2 heteroatoms, and

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R<sup>7</sup> denotes hydrogen.

- 4) The methods according to claim 3, wherein for the formula (I)
- 25 R<sup>6</sup> denotes a group of general formula



wherein

n denotes 1, 2, 3 or 4,

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 $R^9$  denotes a group selected from among optionally substituted  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl,  $C_2$ - $C_6$ -alkynyl, -CONH- $C_1$ - $C_{10}$ -alkylene, -O-aryl, -O-heteroaryl, -O-cycloalkyl, -O-heterocycloalkyl, aryl, heteroaryl, cycloalkyl and heterocycloalkyl or a group selected from among -O- $C_1$ - $C_6$ -alkyl- $Q^1$ , -CONR $^8$ - $C_1$ - $C_{10}$ -alkyl- $Q^1$ , -CONR $^8$ - $C_2$ - $C_{10}$ -alkenyl- $Q^1$ , -CONR $^8$ - $Q^2$ , halogen, OH, -SO $_2$ R $^8$ , -SO $_2$ N(R $^8$ ) $_2$ , -COR $^8$  -COOR $^8$  -N(R $^8$ ) $_2$ , -NHCOR $^8$ , CONR $^8$ OC $_1$ - $C_{10}$  alkyl $Q^1$  and CONR $^8$ OQ $^2$ ,

- Q<sup>1</sup> denotes hydrogen, -NHCOR<sup>8</sup>, or a group selected from among an optionally substituted -NH-aryl, -NH-heteroaryl, aryl, heteroaryl, C<sub>3</sub>-C<sub>8</sub>-cycloalkyl- and heterocycloalkyl group,
- Q<sup>2</sup> denotes hydrogen or a group selected from among an optionally substituted aryl, heteroaryl,  $C_3$ - $C_8$ -heterocycloalkyl,  $C_3$ - $C_8$ -cycloalkyl and  $C_1$ - $C_4$ -alkyl- $C_3$ - $C_8$ -cycloalkyl group,

 $R^{10}$  is identical or different and denotes a group selected from among optionally substituted  $C_1$ - $C_6$ -alkyl,,  $C_2$ - $C_6$ -alkenyl and  $C_2$ - $C_6$ -alkynyl, -O- $C_1$ - $C_6$ -alkyl, -O- $C_2$ - $C_6$ -alkenyl, -O- $C_2$ - $C_6$ -alkynyl,  $C_3$ - $C_6$ -heterocycloalkyl and  $C_3$ - $C_6$ -cycloalkyl, or a group selected from among hydrogen,  $-CONH_2$ ,  $-COOR^8$ ,  $-OCON(R^8)_2$ ,  $-N(R^8)_2$ ,  $-NHCOR^8$ ,  $-NHCON(R^8)_2$ ,  $-NO_2$  and halogen, or

adjacent groups R<sup>9</sup> and R<sup>10</sup> together denote a bridge of the formula

$$R^{13}$$
 $N-R^{12}$ 
 $C_1-C_3-Alkyl-Q^1)_m$ 

Y denotes O, S or NR<sup>11</sup>,

25 m denotes 0, 1 or 2

R<sup>11</sup> denotes hydrogen or C<sub>1</sub>-C<sub>2</sub>-alkyl, and

 $R^{12}$  denotes hydrogen or a group selected from among optionally substituted phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl,  $-C_1-C_3$ -alkyl-phenyl,  $-C_1-C_3$ -alkyl-pyridyl,  $-C_1-C_3$ -alkyl-pyrimidinyl and  $-C_1-C_3$ -alkyl-pyridazinyl, and  $R^{13}$  denotes  $C_1-C_6$ -alkyl.

- 5) The methods according to claim 4, wherein for the formula (I) R<sup>1</sup> denotes hydrogen,
- 10 R<sup>2</sup> denotes CH<sub>3</sub>, and R<sup>7</sup> denotes hydrogen.
- 6) A method of treating a disease or condition chosen from cancer, infections, inflammatory and autoimmune diseases said method comprising administering to a patient in need thereof a therapeutically effective amount of a compound of the formula (II),

$$\begin{array}{c|c}
R^1 & R^2 \\
N & N & N \\
N & R^3 \\
(II)
\end{array}$$

wherein

- 20 R<sup>1</sup>-R<sup>5</sup> and X have the meanings given in claim 1.
- 7) A method of treating a disease or condition chosen from HIV, Kaposi's sarcoma, colitis, arthritis, Alzheimer's disease, glomerulonephritis, conditions related to wound healing, bacterial, fungal and/or parasitic infections, leukaemias, lymphoma, solid
   tumours, psoriasis, bone diseases and cardiovascular disease comprising administering to a patient in need thereof a therapeutically effective amount of a compound of the formula (II),

$$\begin{array}{c|c}
R^1 & R^2 \\
N & N & R^4 \\
N & R^5 & R^3
\end{array}$$
(II)

wherein

 $R^1$ - $R^5$  and X have the meanings given in claim 1.

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